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10/813,590	03/31/2004	Simon Tong	0026-0083	4340

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EXAMINER
LU, KUEN S

ART UNIT	PAPER NUMBER
2167	

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>31 March 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-31</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-31</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>31 March 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>31 March 2004</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1. The Action is responsive to Applicant's Application filed March 31, 2004. Please

note Claims 1-31 are pending.

Information Disclosure Statement

2. Information Disclosure Statements filed March 31, 2004 is considered and

corresponding PTO-1449 is electronically signed and attached.

Drawings

3. The drawings, filed March 31, 2004, are considered in compliance with 37 CFR 1.81

and accepted.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
subject matter which the applicant regards as his invention.

4.1. Claims 11, 27 and 30 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

As per claims 11, 27 and 30, the phrase "do not substantially affect" renders the

claim(s) indefinite because the claim(s) include(s) elements not actually disclosed

(those encompassed by " do not substantially affect "), thereby rendering the scope of

the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 101

5. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5.1. As set forth in MPEP 2106 (II) (A):

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.

Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See Arrhythmia, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make the invention eligible for patenting. For example, a claim directed to a word processing file stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since the information stored may have some "real world" value. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application.

5.2. Claims 11-20 and 27-30 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

As per claims 11, 27 and 30, the claims respectively represents a method, a device and a program of the claimed invention for identifying stopwords in a query, retrieving context data and rewriting a query to remove stopwords. However, the method, device and program each individually does not removing the stopwords. The steps are abstract because no concrete, useful or tangible result ensued by performing the steps. Further, the device claim 37 does not include hardware or means for supporting performing the steps. Furthermore, Claim 30 is directed to a computer-readable medium

containing instructions for performing the steps. However, the claimed "computer-readable medium containing instructions" comprises wireless telecommunication signals and carrier waves, forms of energy. As forms of energy, the signals and waves are not a matter, composition of matter or product; and do not fall within any one of categories of patentable subject matter. For further rejecting the claims under 35 USC §102 or 35 USC §103, Examiner interprets "computer-readable medium" as "computer-readable storage medium". It is further concluded that the claimed invention does not produce concrete, tangible and useful result, however, a tangible, concrete and useful result is required in a practical application test. The consequence is non-statutory.

As per claims 12-20 and 28-29, the claims inherit the deficiency of being non-statutory from claims 11 and 27, respectively, and do not remedy the deficiency individually or by inheritance. The consequence is non-statutory.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

6.1. A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.2. Claims 1-20 and 27-30 are rejected under 35 U.S.C. 102(b) as anticipated by

McGreevy (U.S. Patent Application 2003/0004914).

As per claim 1, McGreevy teaches "A method of detecting stopwords in a query"

(See Fig. 13 and Page 17, [0194]-[0198] where a query model is detected for its

relations containing stopterms in phrase search and the query model is modified)

comprising:

"identifying a potential stopword in the query based on a comparison to a list of

stopwords" (See Figs. 12-13 and Page 17, [0194]-[0198] where query is parsed for its

fields to create query relation in term pair for comparing with query relations in query

model for detecting query relations having stopterms);

"generating a plurality of sets of context data based on the query and the potential

stopword" (See Figs. 12-13 and Page 17, [0194]-[0198] where queries are parsed for its

fields to generate query relations in term pairs);

"comparing the sets of context data" (See Figs. 12-13 and Page 17, [0194]-[0198]

where query is parsed for its fields to create query relation in term pair for comparing

with query relations in query model for detecting query relations having stopterms); and

"classifying the potential stopword as an actual stopword based on the comparing"

(See Pages 17-18, [0198] and [0202] where relevance of query relation to stopterms is

weighted for eliminating the relations in a query model).

As per claims 11, 27 and 30, Wan teaches a method, a device comprising means

for and instructions on medium, respectively, to perform the following:

"identifying potential stopwords in a query" (See Figs. 12-13 and Page 17, [0194]-

[0198] where query is parsed for its fields to create query relation in term pair for

comparing with query relations in query model for detecting query relations having

stopterms);

"generating context data based on the query and the potential stopwords" (See Figs.

12-13 and Page 17, [0194]-[0198] where queries are parsed for its fields to generate

query relations in term pairs); and

"rewriting the query to remove one or more of the potential stopwords that do not

substantially affect the generation of the context data" (See Pages 17-18, [0198] and

[0202] where relevance of query relation to stopterms is weighted for eliminating the

relations in a query model).

As per claim 2, McGreevy teaches "The method of claim 1, further comprising:

rewriting the query to remove the actual stopword from the query" (See Pages 17-18,

[0198] and [0202] where relevance of query relation to stopterms is weighted for

eliminating the relations in a query model).

As per claim 3, McGreevy teaches "The method of claim 1, wherein the potential

stopword includes a plurality of stopwords and each of the plurality of sets of context

data corresponds to a combination of the potential stopwords" (See Pages 17-18,

[0198] and [0202] where relevance of query relation to stopterms is weighted for eliminating the relations in a query model, and relations created from a first and a second query terms are eliminated from query model if the relations fall in the collections of stop relations).

As per claim 4, McGreevy teaches "The method of claim 1, wherein comparing the sets of context data includes comparing the sets of context data to one another to determine whether various ones of the plurality of sets of context data are substantially similar" (See Pages 17-18, [0198] and [0202] where relevance of query relation to stopterms is weighted for eliminating the relations in a query model).

As per claim 5, McGreevy teaches the method of claim 1, wherein generating the plurality of sets of context data includes:

"generating a first set of context data from the query" (See Pages 17-18, [0194], [0198] and [0202] where query includes a number of query fields in a query model is generated and parsed); and

generating a second set of context data from a version of the query in which the potential stopword is removed" (See Pages 17-18, [0198] and [0202] where relevance of query relation to stopterms is weighted for eliminating the relations in a query model).

As per claim 6, McGreevy teaches the method of claim 1, wherein generating the plurality of sets of context data includes:

"deriving a plurality of second queries from the query and the potential stopword" (See

Pages 17-18, [0198] and [0202] where relevance of query relation to stopterms is

weighted for eliminating the relations in a query model); and

"querying a database using the plurality of second queries" (See Pages 17-18, [0198]

and [0202] where a query model is modified as a function of stopterms in the query).

As per claim 7, McGreevy teaches "The method of claim 6, wherein querying the

database includes issuing the plurality of second queries to a search engine, and

wherein the potential stopword includes a plurality of potential stopwords and the

plurality of second queries are derived from combinations of the potential stopwords

plus terms in the query that are not potential stopwords" (See Page 16, [0186] where

keyterm and its context relevance are used to query a database, at Page 17, [0196]

where stopterms are added to or removed from a list, and at Pages 17-18, [0198] and

[0202] where relevance of query relation to stopterms is weighted for eliminating the

relations in a query model).

As per claim 8, McGreevy teaches the method of claim 1, wherein generating the

plurality of sets of context data includes:

"deriving a plurality of second queries from the query and the potential stopword" (See

Fig. 13 and Page 17-18, [0194]-[0198] where a query model is detected for its relations

containing stopterms in phrase search and the query model is modified and stop

relation is blocked based on a collection of the related concepts described by the stop

relation); and

"locating categories relevant to the second queries using a category generator" (See

Pages 17-18, [0198] and [0202] where relations are created from a first and a second

query terms which are eliminated from query model if the relations fall in the collections

of stop relations).

As per claim 9, McGreevy teaches "The method of claim 8, wherein the potential

stopword includes a plurality of potential stopwords and plurality of second queries are

derived from combinations of the potential stopwords plus terms in the query that are

not potential stopwords" (See Fig. 13 and Page 17-18, [0194]-[0198] where a query

model is detected for its relations containing stopterms in phrase search and the query

model is modified and stop relation is blocked based on a collection of the related

concepts described by the stop relation).

As per claim 10, McGreevy teaches "The method of claim 1, wherein the potential

stopword includes a stop-phrase" (See Pages 17-18, [0198] and [0202] where

relevance of query relation to stopterms is weighted for eliminating the relations in a

query model, and relations created from a first and a second query terms are eliminated

from query model if the relations fall in the collections of stop relations).

As per claim 12, McGreevy teaches "The method of claim 11, wherein generating

14.   The method of claim 11, wherein generating the context data includes: the

context data includes: retrieving a plurality of sets of context data in which each said

set corresponds to a different combination of the potential stopwords" (See Fig. 13 and

Page 17-18, [0194]-[0198] where a query model is detected for its relations containing

stopterms in phrase search and the query model is modified and stop relation is blocked

based on a collection of the related concepts described by the stop relation).

As per claim 13, McGreevy teaches "The method of claim 12, further comprising:

comparing the plurality of sets of context data to one another to determine whether

various ones of the plurality of sets of context data are substantially similar, wherein

rewriting the query to remove one or more of the potential stopwords that do not

substantially affect the generation of the context data is based on the comparison of

the plurality of sets of context data" (See Pages 17-18, [0198] and [0202] where

relevance of query relation to stopterms is weighted for eliminating the relations in a

query model).

As per claim 14, McGreevy teaches the method of claim 11, wherein generating the

context data includes:

"generating a first set of context data as context data derived from the query" (See

Pages 17-18, [0194], [0198] and [0202] where query includes a number of query fields

in a query model is generated and parsed); and

"generating a second set of context data as context data derived from a version of the query in which one or more potential stopwords are removed" (See Pages 17-18, [0198] and [0202] where relevance of query relation to stopterms is weighted for eliminating the relations in a query model).

As per claim 15, McGreevy teaches the method of claim 11, wherein generating the context data includes:

"deriving a plurality of second queries from the query and the potential stopwords" (See Pages 17-18, [0198] and [0202] where relevance of query relation to stopterms is weighted for eliminating the relations in a query model); and

"querying a database using the plurality of second queries" (See Pages 17-18, [0198] and [0202] where a query model is modified as a function of stopterms in the query).

As per claim 16, McGreevy teaches the method of claim 15, wherein the plurality of second queries are derived from combinations of the potential stopwords plus terms in the query that are not potential stopwords" (See Page 16, [0186] where keyterm and its context relevance are used to query a database, at Page 17, [0196] where stopterms are added to or removed from a list, and at Pages 17-18, [0198] and [0202] where relevance of query relation to stopterms is weighted for eliminating the relations in a query model).

As per claim 17, McGreevy teaches the method of claim 11, wherein generating the context data includes:

"deriving a plurality of second queries from the query and the potential stopwords" (See Fig. 13 and Page 17-18, [0194]-[0198] where a query model is detected for its relations containing stopterms in phrase search and the query model is modified and stop relation is blocked based on a collection of the related concepts described by the stop relation); and

"issuing the plurality of second queries to a category generator to locate categories relevant to the second queries" (See Pages 17-18, [0198] and [0202] where relations are created from a first and a second query terms which are eliminated from query model if the relations fall in the collections of stop relations).

As per claim 18, McGreevy teaches the method of claim 17, wherein "the plurality of second queries are derived from combinations of the potential stopwords plus terms in the query that are not potential stopwords" (See Fig. 13 and Page 17-18, [0194]-[0198] where a query model is detected for its relations containing stopterms in phrase search and the query model is modified and stop relation is blocked based on a collection of the related concepts described by the stop relation).

As per claim 19, McGreevy teaches the method of claim 11, wherein "identifying the potential stopwords includes: matching terms in the query to a pre-defined list of stopwords" (See Fig. 13 and Page 17-18, [0194]-[0198] where a query model is

detected for its relations containing stopterms in phrase search and the query model is

modified and stop relation is blocked based on a collection of the related concepts

described by the stop relation).

As per claim 20, McGreevy teaches the method of claim 11, wherein the "potential

stopwords include potential stopwords and stop-phrases" (See Fig. 13 and Page 17-18,

[0194]-[0198] where a query model is detected for its relations containing stopterms in

phrase search and the query model is modified and stop relation is blocked based on a

collection of the related concepts described by the stop relation).

As per claim 28, McGreevy teaches the device of claim 27, further comprising:

"means for searching a document index to locate a set of documents and return the

set of documents to the means for generating context data" (See Page 16, [0186

where documents are searched, retrieved and sorted on their relevance to the keyterm

in context).

As per claim 29, McGreevy teaches the device of claim 27, further comprising:

"means for locating a list of categories relevant to an input category query and returning

the list of categories to the means for generating context data" (See Page 29, [0326]

where phrase extraction from query can include sets of special terms to determine the

extent of term allowed to appear in a particular position within a phrase).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7.1. Claims 21-26 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Wan (U.S. Patent Application 2003/0233618) in view of McGreevy (U.S. Patent

Application 2003/0004914).

As per claim 31, Wan teaches "A document retrieval system" (See Page 1, [0001]

where structured-documents are indexes and queried) comprising:

"a search engine" (See Fig. 2 and Page 3, [0033] where an extended processor is the

search engine) configured to:

"receive a user search query" (See Page 2, [0033] where a query is received by query

preprocessor in the extended processor); and

"receive rewritten versions of the search query" (See Page 2, [0033] where the high

level query is modified to generated a reformulated query for query processor to parse

and analyze).

Wan does not explicitly teach the query is revised to "exclude stopwords not material

to an intended result of the search query", although Wan teaches reformulating user

query by substituting non-indexing components with corresponding components at Fig.

5 and Page 4, [0043].

However, McGreevy teaches weighting relevance less or eliminating the relations in a

query model that containing stopterms or terms treated as the same at Pages 17-18,

[0198] and [0202].

It would have been obvious to one having ordinary skill in the art at the time of the

applicant's invention was made to combine the teaching of McGreevy with Wan

references because both references are directed to query searching relational

databases and re-writing queries where Wan concerns building indices on XML

elements and attributes for fast searching in which large indices making database

update very inefficient while McGreevy reference teaches phrase search by creating

and comparing relational models, and the combined teaching of the references would

have improved performance of fast searching of XML database and efficiency of

updating a database of structured documents with very large indices of Wan's system

because subset database search or update could have been performed (See

BACKGROUND or BACKGROUND OF THE INVENTION of the references).

The combined teaching of the McGreevy and Wan references further teaches the

following:

"perform a search of a document index based on the rewritten versions of the search

query" (See Wan: Page 1, [0006] where a reformulated query is executed with

references to indexing components in which the indices of the indexed components are

utilized in the query for providing query results); and

"a stopword detection component to rewrite the search query" (See McGreevy: Fig. 13

and Page 17, [0194]-[0198] where a query model is detected for its relations containing

stopterms in phrase search and the query model is modified), the stopword detection

component including:

"a parser component configured to receive the user search query and identify potential

stopwords in the search query" (See McGreevy: Figs. 12-13 and Page 17, [0194]-[0198]

where query is parsed for its fields to create query relation in term pair for comparing

with query relations in query model for detecting query relations having stopterms);

"a context generation component to generate context data based on the search query

and the potential stopwords" (See McGreevy: Figs. 12-13 and Page 17, [0194]-[0198]

where query is parsed for its fields to generate query relation in term pair); and

"a comparator component to compare the context data to determine those of the

potential stopwords that affect the context data" (See McGreevy: Figs. 12-13 and Page

17, [0194]-[0198] where query is parsed for its fields to create query relation in term pair

for comparing with query relations in query model for detecting query relations having

stopterms)".

As per claim 21, Wan teaches a system comprising:

"a parser component configured to receive a search query" (See Page 2, [0033] where

a query is received by query preprocessor in the extended processor and the query is

modified to generated a reformulated query for query processor to parse and analyze).

Wan does not explicitly teach the parser component configured to "identify potential stopwords in the search query", although Wan teaches reformulating user query by substituting non-indexing components with corresponding components at Fig. 5 and Page 4, [0043].

However, McGreevy teaches weighting relevance less or eliminating the relations in a query model that containing stopterms or terms treated as the same at Pages 17-18, [0198] and [0202].

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of McGreevy with Wan references because both references are directed to query searching relational databases and re-writing queries where Wan concerns building indices on XML elements and attributes for fast searching in which large indices making database update very inefficient while McGreevy reference teaches phrase search by creating and comparing relational models, and the combined teaching of the references would have improved performance of fast searching of XML database and efficiency of updating a database of structured documents with very large indices of Wan's system because subset database search or update could have been performed (See BACKGROUND or BACKGROUND OF THE INVENTION of the references).

The combined teaching of the McGreevy and Wan references further teaches the following:

"a context generation component to generate context data based on the search query

and the potential stopwords" (See McGreevy: Figs. 12-13 and Page 17, [0194]-[0198] where queries are parsed for its fields to generate query relations in term pairs); and "a comparator component to compare the context data to determine those of the potential stopwords that effected generation of the context data" (See McGreevy: Figs. 12-13 and Page 17, [0194]-[0198] where query is parsed for its fields to create query relation in term pair for comparing with query relations in query model for detecting query relations having stopterms).

As per claim 22, the combined teaching of the McGreevy and Wan references further teaches the system of claim 21, wherein, when "the comparator determines that one **or more of** the potential stopwords do not substantially effect generation of the context data, the search query is rewritten to a form that does not include the one or more of the potential stopwords that do not substantially affect generation of the context data" (See McGreevy: Pages 17-18, [0198] and [0202] where relevance of query relation to stopterms is weighted for eliminating the relations in a query model, and relations created from a first and a second query terms are eliminated from query model if the relations fall in the collections of stop relations).

As per claim 23, the combined teaching of the McGreevy and Wan references further teaches the system of claim 21, wherein "the context generation component includes a search engine" (See McGreevy: Fig. 23 and Page 38, [0388] where embodiment of system for phrase search includes a processor).

As per claim 24, the combined teaching of the McGreevy and Wan references further teaches the system of claim 23, wherein "the comparator component compares sets of documents returned from the search engine to determine those of the potential stopwords that affect generation of the context data" (See McGreevy: Pages 17-18, [0198] and [0202] where query terms pair is created from selected query model and compared to the relations in query model for determining the relation pair is blocked, reversed or other processing).

As per claim 25, the combined teaching of the McGreevy and Wan references further teaches the system of claim 21, wherein "the context generation component includes a category generator configured to locate category lists relevant to a search query" (See McGreevy: Pages 17-18, [0198] and [0202] where relations are created from a first and a second query terms which are eliminated from query model if the relations fall in the collections of stop relations).

As per claim 26, the combined teaching of the McGreevy and Wan references further teaches "The system of claim 25, wherein the comparator component compares category lists to one another to determine those of the potential stopwords that affect generation of the context data" (See McGreevy: Pages 17-18, [0198] and [0202] where relevance of query relation to stopterms is weighted for eliminating the relations in a query model).

Conclusion

8. The prior art made of record

    A. U.S. Patent Application 2003/0004914

    B. U.S. Patent Application 2003/0233618

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

    C. U.S. Patent No.   6,477,524

    D. U.S. Patent No.   6,360,215

    E. U.S. Patent Application 2004/0088308

    F. U.S. Patent Application 2003/0088562

    G. U.S. Patent Application 2003/0069877

    H. U.S. Patent Application 2004/0215608

    I. U.S. Patent Application 2004/0068697

Contact Information

9. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kuen S Lu whose telephone number is (571) 272-

4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm).

If attempts to reach the examiner by telephone pre unsuccessful, the examiner's

Supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the Patent

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